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“Teachers are the one and only people who save nations”

**Mustafa Kemal ATATÜRK**

19 May 1919 is Mustafa Kemal's landing at Samsun, regarded as the beginning of the Turkish War of Independence

<http://zoobank.org/urn:lsid:zoobank.org:pub:B872328B-72B7-4388-8DF5-4BACEAD8F168>

## First contribution to the knowledge of the Pterygota fauna of Bahçesaray (Van Province, East Turkey)

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**Abstract:** First contribution to the knowledge of the Pterygota fauna of Bahçesaray (Van Province, East Turkey). Cent. ent. Stud., *Misc.Pap.* 161: 1-16, 21 figs.

This paper deals with the annotated faunistical list of 146 species of 50 families of 10 pterygota orders in Bahçesaray district of Van Province (East Turkey).

**Key words:** Pterygota, Lepidoptera, Dermaptera, Orthoptera, Mantodea, Homoptera, Hemiptera, Planipennia, Diptera, Hymenoptera, Coleoptera, Bahçesaray, Van, Turkey, fauna.



**Fig. 1 -** On the road of Bahçesaray the mountainous region from Krapet Pass, 2950m, 8 5 2016, M. Kemal (Cesa)

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Bahçesaray is one of the most interesting, and least investigated district of Van Province from the entomo-faunistical standpoint. The main roads of this mountainous district remain closed for many months in the year, due to the heavy snow fall (**Fig. 1**). This was the one reason among the others that prevent the authors' excursions to this district in the past. This year, it is privately planned by the authors to begin to study the entomo-fauna of Bahçesaray district. For this purpose, a short visit was realized between 8-11 May, 2016, taking also an invitation on 4 May, 2016 by the officers of "Gıda, Tarım ve Hayvancılık İlçe Müdürlüğü, Bahçesaray", into consideration. The main reason of this unexpected and short visit was to observe of an invasion of interesting grasshopper species (*Polysarcus* sp., *Tettigoniidae*) at the Upper Heights of Bahçesaray. The first observational notes on this species will be separately published in the next issue of this serial. In the meantime, the authors visited several places (see below) in the district for the purpose of observing and collecting diurnal and nocturnal pterygota species, in order to prepare the first comprehensive faunal list of Bahçesaray.

Bahçesaray is a very small administrative city (**Fig. 2**), near the "Mukus" mountain stream at an elevation of 1620m, at a distance of 110 km from Van. The current official name of the city is reportedly given after the Tatar immigrants, coming to Turkey from Crimean city Bakhchisarai<sup>2</sup> in the past centuries.



**Fig. 2** – A view of Bahçesaray, 11 5 2016, M.Kemal (Cesa)

In the present paper, the faunistical results are given in the following annotated list. Briefly, in their previous studies on the Pterygota of Turkey, the authors published within the last few years various comprehensive lists on the fauna of Van, Malatya, Muş, Kahramanmaraş, Hatay, Hakkari, Sivas, or regionally South East Turkey, Turkey, South East Asia, etc. (Kemal & Koçak, 2014a-b, 2015a-b, 2016a-c; Koçak & Kemal, 2007, 2008, 2009a-b, 2010, 2012, 2013, 2014, 2015a-f; Koçak, 2014). This year, the authors planned to study extensively on the fauna of Bahçesaray. Faunistical results will be published at irregular intervals. The major groups to be studied are the whole Lepidoptera, some genera of Orthoptera, Mantodea, Homoptera (some groups of

<sup>2</sup> **Bakhchysarai** (Ukrainian: Бахчисарай; Crimean Tatar: Bağçasaray; Russian: Бахчисарай; Turkish: Bahçesaray (Wikipedia: <https://en.wikipedia.org/wiki/Bakhchysarai>)

Auchenorrhyncha), terrestrial Hemiptera, Planipennia, some families and genera of the orders, Diptera, Hymenoptera, and Coleoptera.

### Places visited in Bahçesaray with their codes

- 1- On 8 5 2016, İmamlı köyü, mezrası 2620m, Tragacanthic *Astragalus-Acantholimon* steppe on stony slopes (**65Aj**).
- 2- On 8 5 2016, light trap near Paşaköy, opening *Quercus petraea* woodland (**65Ai**).
- 3- On 9 5 2016, observation and collecting with net by day, near Paşaköy, opening *Quercus petraea* woodland (**65Ai**).
- 4- On 9 5 2016, the vicinity the villages of Kartal (**65Ag**) and Güneyyamaç (**65Ah**), observing and collecting by day.
- 5- On 9 5 2016, light trap, Bahçesaray Vasting, in orchards (**65An**).
- 6- On 10 5 2016, Upper Mukus Valley, 1800-1950m, observation and collecting with net by day (**65Am1**, **65Am3**). In the evening, observations orchards in Kasr (**65Ao**).
- 7- On 10 5 2016, light trap, Upper Mukus Valley, 1910m (**65Am2**).

### Annotated list of the Pterygota species recorded from Bahçesaray

The species, known by the authors from Bahçesaray before this publication, are marked with \*. Totally 146 species of 50 families of 10 pterygot orders are listed alphabetically. The materials studied are mentioned below with the codes of the localities. All the taxa listed below are identified by the authors. Genitalic preparations are made by the first author. The material studied are preserved in the Research Collection of the CESA with the code of Cool URI: <http://grbio.org/cool/eaaz-xyfc>

## Lepidoptera

### Butterflies

#### Argynniidae

- 1) *Aglais urticae* (Linnaeus,1758). Observed at 65Am3.
- 2) \**Argynnis (Pandoriana) pandora* ([Denis & Schiffermüller],1775)
- 3) *Issoria lathonia* (Linnaeus,1758). Material studied: 2♂ at 65Ai, 1♂ at 65Am1.
- 4) *Melitaea (Cinlidia) phoebe* (Goeze,1779). Observed at 65Ao.
- 5) *Melitaea (Didymaeformis) syriaca* Rebel,1905. Observed its larvae on *Verbascum* at 65Ah.
- 6) *Nymphalis polychloros* (Linnaeus,1758). Material studied: 1♀ (hibernated) at 65Ai.
- 7) *Vanessa (Cynthia) cardui* (Linnaeus,1758). Observed migrating specimens at all localities.

#### Hesperiidae

- 8) *Carcharodus (s.str.) alceae* (Esper,[1780]). Material studied: 1♂ at 65Am1.
- 9) *Erynnis (s.str.) tages* (Linnaeus,1758). Material studied: 2♂ at 65Ai.
- 10) \**Hesperia comma* (Linnaeus,1758).
- 11) *Pyrgus melotis* (Duponchel,[1834]). Observed at 65Ao.
- 12) \**Pyrgus serratulae* (Rambur,[1839]).

#### Lycaenidae

- 13) *Callophrys danchenkoi* Zhdanko,1998. Material studied: 3♂ at 65Am1.
- 14) *Callophrys paulae* Pfeiffer,1932. Material studied: 3♂ at 65Am1.
- 15) *Celastrina argiolus* (Linnaeus,1758). Material studied: 1♂ at 65Ai.
- 16) *Cupido (s.str.) osiris* (Meigen,[1829]). Material studied: 1♂ at 65Am1.
- 17) *Glaucopsyche (s.str.) alexis* (Poda,1761). Material studied: 1♂ at 65Am1.

- 18) *Lycaena (Loweia) tityrus* (Poda,1761). Material studied: 3♂ at 65Ai, 1♂ at 65Am1.  
 19) \**Lycaena (Palaeochrysophanus) candens* (Herrich-Schäffer,[1845]).  
 20) *Lycaena (s.str.) phlaeas* (Linnaeus,1761). Material studied: 2♂ at 65Ai, 1♂ at 65Am1.  
 21) \**Polyommatus (Aricia (Eumedonia)) eumedon* (Esper,[1780]).  
 22) \**Polyommatus (Aricia (Ultraaricia)) crassipunctus* (Christoph,1893).  
 23) *Polyommatus (Aricia (s.str.)) agestis* ([Denis & Schiffermüller],1775). Material studied: 2♂ at 65Ag.  
 24) *Polyommatus (s.str. (Agrodiaetus (Actisia))) pseudactis* (Forster,1960).  
 25) \**Polyommatus (s.str. (Agrodiaetus (Phyllisia))) igitizilim* Koçak & Kemal,2001.  
 26) *Polyommatus (s.str. (Lysandra)) bellargus* (Rottemburg,1775). Material studied: 4♂ at 65Ai, observed at 65Ao.  
 27) \**Polyommatus (s.str. (Neolysandra)) fatima* Eckweiler & Schurian,1980.  
 28) *Polyommatus (s.str.) icarus* (Rottemburg,1775). Material studied: 3♂ at 65Ai, 1♂ at 65Am1, 1♂ at 65Ag.

## Papilionidae

- 29) *Archon apollinaris* (Staudinger,[1892]). Material studied: 1♀ at 65Am3.  
 30) *Iphiclides podalirius* (Linnaeus,1758). Material studied: 1♂ at 65Ai.  
 31) *Zerynthia (Allancastris) deyrollei* (Oberthür,1869). Material studied: 3♂ 1♀ at 65Am1, 1♂ at 65Ai.

## Pieridae

- 32) *Anthocharis cardamines* (Linnaeus,1758). Material studied: 1♂ at 65Ag.  
 33) *Anthocharis damone* Boisduval,1836. Material studied: 1♂ at 65Ai, 1♂ at 65Am1.  
 34) *Anthocharis grueneri* Herrich-Schäffer,[1851]. Material studied: 5♂ at 65Ai, 2♂ at 65Am1, 2♂ at 65Ag, 1♂ at 65Ah.  
 35) *Aporia (s.str.) crataegi* (Linnaeus,1758). Observed larvae at 65Am1 and 65Ai.  
 36) *Colias (Eriocolias) crocea* (Fourcroy,1785). Material studied: 1♂ at 65Am1.  
 37) \**Colias (Eriocolias) thisoa* Ménétriés,1832.  
 38) *Gonepteryx (s.str.) rhamni* (Linnaeus,1758). Material studied: 2♂ at 65Am1.  
 39) *Leptidea duponcheli* (Staudinger,1871). Material studied: 1♂ at 65Am1.  
 40) *Leptidea sinapis* (Linnaeus,1758). Material studied: 3♂ at 65Ai, 1♂ at 65Am1.  
 41) *Pieris (Artogeia) ergane* (Geyer,[1828]). Material studied: 1♂ at 65Am1.  
 42) *Pieris (Artogeia) persis* Verity,1922. Material studied: 4♂ at 65Ai, 1♂ 1♀ (in copula) at 65Am1.  
 43) *Pieris (s.str.) brassicae* (Linnaeus,1758). Material studied: 1♂ at 65Ai.  
 44) *Pontia chloridice* (Hübner,[1813]). Material studied: 1♂ at 65Ai.

## Satyridae

- 45) *Coenonympha (s.str.) pamphilus* (Linnaeus,1758). Material studied: 4♂ at 65Ai, 1♂ at 65Am1.  
 46) \**Esperarge (s.str.) clymene* (Fabricius,1787).

## Moths

### Arctiidae

- 47) \**Lacydes spectabilis* (Tauscher,1806).

### Coleophoridae

- 48) *Coleophora* sp. Material studied: 1♂ at 65Am2, nocturnal.



**Ethmiidae**

- 49) ***Ethmia similis* Sattler, 1967.** Material studied: 3♂ at 65Am2, nocturnal. This nocturnal species was previously reported by the authors from Hazro (Diyarbakır Prov.) (GP2181♂) (Kemal & Koçak, 2015c). This species was also known from Çatak (Van Province).

**Geometridae**

- 50) ***Aleucis distinctata* (Herrich-Schäffer, [1839]).** Material studied: 1♂ at 65An.  
 51) ***Coenotephria ablutaria* (Boisduval, 1840).** Material studied: 2♂ at 65Am2 (GP2346). New for the fauna of Van Province! (Figs. 3-8)  
 52) ***Dasycorsa modesta* (Staudinger, 1879).** Material studied: 3♂ at 65An, 3♂ at 65Am2.  
 53) ***Eilicrinia cordiaria* (Hübner, 1790).** Material studied: 1♀ at 65Am2.  
 54) ***Heliomata glarearia* (Brahm, 1791).** Material studied: 1♂ at 65An.  
 55) ***Idaea filicata* (Hübner, [1799]).** Material studied: 1♂ at 65An.  
 56) ***Lithostege palaestinensis* Amsel, 1935.** Material studied: 1♂ at 65Am2 (GP2347). New for the fauna of Van Province! (Figs. 9-12)  
 57) ***Minoa murinata* (Scopoli, 1763).** Material studied: 1♂ at 65An. New record for the fauna of Van Province!  
 58) ***Pseudopanthera syriacata* (Guenée, 1858).** Material studied: 1♂ at 65Ai, 1♂ at 65An.  
 59) ***Ramitia kufrana* E. Seven, 2016.** Material studied: 1♂ at 65Ai. New record for the fauna of Van Province!



**Figs. 3, 4** – *Coenotephria ablutaria*, male upperside (left) and underside (right). Upper Mukus valley, For its genitalia, see fig. 5, M. Kemal (Cesa)



**Figs. 5, 6** – *Coenotephria ablutaria*, top: male genitalia, GP2346, below: abdominal segments and tympanal organ. Upper Mukus valley, M. Kemal (Cesa)



**Figs. 7, 8** – *Coenotephria ablutaria*, left: ventro-basal of abdomen and tympanal organ before preparation; right same position of abdomen and tympanal organ after preparation, GP 2346♂. Upper Mukus valley, M. Kemal (Cesa)



**Figs. 9, 10** - *Lithostege palaestinensis*, male genitalia (above), abdominal segments and tympanal organ (below), GP2347, M. Kemal (Cesa)





**Figs. 11, 12** - *Lithostege palaestinensis*, male tympanal organ before preparation (left), tympanal organ after preparation (right), GP2347♂, M. Kemal (Cesa)

## Noctuidae

- 60) *Acronicta (Viminia) rumicis* (Linnaeus,1758). Material studied: 1♂ at 65Ai.
- 61) *?Acontiola* sp. Material studied: 1 ex. at 65Am1. Different wing markings from *A. moldavica*.
- 62) *Agrotis (s.str.) ipsilon* (Hufnagel,1766). Material studied: 5♂ at 65Ai, 1♂ at 65An.
- 63) *Agrotis (s.str.) segetum* ([Denis & Schifferrmüller],1775). Material studied: 4♂♀ at 65Ai, 3♂ at 65An.
- 64) *Autophila* sp. Material studied: 2♂♀ at 65Am2.
- 65) *Chloantha hypericii* (Fabricius,1787). Material studied: 1♂ at 65Ai.
- 66) *Cornutiplusia circumflexa* (Linnaeus,1767). Material studied: 1♂ at 65Ai, 1♂ at 65An.
- 67) *Egira anatolica* (M.Hering,1933). Material studied: 14♂♀ at 65Ai. GP2348♂. (**Figs. 13, 14**)
- 68) *Eublemma (ostrina-gr.) ostrinum* (Hübner,[1808]). Material studied: 1♂ at 65Am2.
- 69) *Euclidia glyphica* (Linnaeus,1758). Material studied: 1♂ at 65Ai, diurnal.
- 70) *Helicoverpa armigera* (Hübner,[1808]). Material studied: 4♂ at 65Ai.
- 71) *Heliothis peltigera* ([Denis & Schifferrmüller],1775). Material studied: 1♂ at 65Ai nocturnal, 1♂ at 65Am1, diurnal, 1♂ at 65Am2, nocturnal.
- 72) *Lacanobia (s.str.) w-latinum* (Hufnagel,1766). Material studied: 6♂ at 65An.
- 73) *Mythimna (Aletia) vitellina* (Hübner,[1808]). Material studied: 5♂ at 65Am2, 11♂ at 65Ai, 12♂♀ at 65An.
- 74) *Noctua (Latanoctua) orbona* (Hufnagel,1766). Material studied: 1♂ at 65An.
- 75) *Perigrapha (Opacographa) cilissa* Püngeler,1917. Material studied: 1♂ at 65Am2. Paler than that of Göründü (Gevaş).
- 76) *Spodoptera exiguum* (Hübner,[1808]). Material studied: 3♂ at 65An.

## Notodontidae

- 77) *Cerura (s.str.) vinula* (Linnaeus,1758). Material studied: 2♂ at 65Am2.



**Fig. 13** – *Egira anatolica*, male genitalia, GP 2348, M. Kemal (Cesa)



**Fig. 14** – *Egira anatolica*, male tympanal organ on the metathorax segment, M. Kemal (Cesa)

## Oecophoridae

78) *Pleurota* sp. Material studied: 1 ex at 65Am1, diurnal.

## Pyralidae

79) *Ecpyrrhorhoe diffusalis* (Guenée, 1854). Material studied: 1♂ at 65Am2.

80) \**Galleria mellonella* (Linnaeus, 1758).



- 81) *Nomophila noctuella* ([Denis & Schiffermüller],1775). Material studied: 1♂ at 65Am2 nocturnal, 1♂ at 65Am3 diurnal.
- 82) *Pyrausta aurata* (Scopoli,1763). Material studied: 1♂ at 65Am2 nocturnal, 1♂ at 65Am1 diurnal, 2♂ at 65Ai, 1♂ at 65Ag diurnal, 1♂ at 65An nocturnal.
- 83) *Pyrausta despicata* (Scopoli,1763). Material studied: 1♂ at 65Ai diurnal.
- 84) *Udea ferrugalis* (Hübner,1796). Material studied: 1♂ at 65Am1 diurnal, 1♂ at 65Ai nocturnal.

### Sphingidae

- 85) *Hyles conspicua* (Rothschild & Jordan,1903). Material studied: 1♂ at 65An.

### Thyatiridae

- 86) *Polyloca korbi* Rebel,1901. Material studied: 1♂ at 65Ai, nocturnal.

### Tortricidae

- 87) *Aphelia (Zelothereses) ferugana* (Hübner,1793). Material studied: 1♂ at 65An nocturnal.
- 88) *Cnephasia* sp. Material studied: 5♂♀ at 65An nocturnal, 1♂ at 65Ag, diurnal.

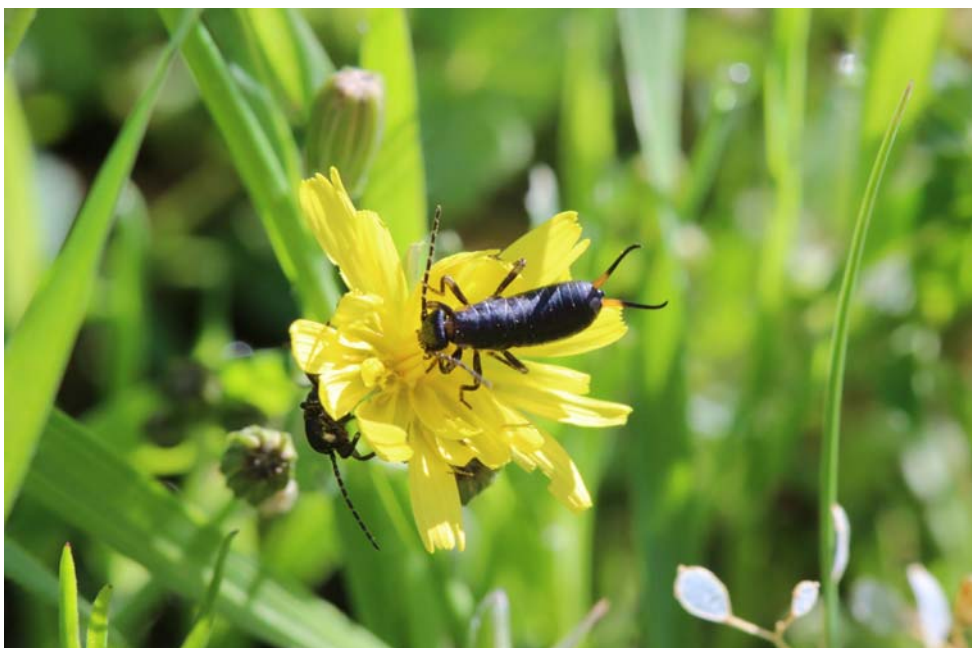
### Yponomeutidae

- 89) *Plutella* (s.str.) sp. Material studied: 4♂ at 65Am2, nocturnal; 3♂ at 65Am1 diurnal.

## Other Pterygota

### Dermaptera

- 90) Unidentified species. Observed on flowers probably in nymph stages (**Fig. 15**).



**Fig. 15** – Nymphs of Earwig feeding on Asteraceae flower, Upper Mukus valley 1910m, 10 5 2016, M. Kemal (Cesa)

## Orthoptera

### Pamphagidae

- 91) ***Paranocaracris rubripes* (Fischer von Waldheim, 1846)**. Material studied: 3♂♀ at 65Aj, 1♂ at 65Ai. One of the most widely distributed species of the family in Turkey (**Figs. 16, 17**).



**Figs. 16, 17** - *Paranocaracris rubripes*, male lateral and dorsal view. M Kemal (Cesa)

### Tettigoniidae

In May, numerous species were observed in nymph stages (**Fig. 18**).



**Fig. 18** - A view of ecdysis process in the nymph stage in the family *Tettigoniidae*. Bahçesaray Paşaköy, 8 5 2016, M. Kemal (Cesa)

- 92) ***Polysarcus* aff. *elbursianus* (Uvarov, 1930)**. This species will be separately evaluated.

**Tetrigidae**

- 93) *Tetrix* sp. Observed near stream. Material studied: 1♂ at 65Ag.

**Mantodea****Empusidae**

- 94) *Empusa fasciata* Brullé, 1836. In the spring season, observed in nymph stage. Uncommon.

**Homoptera****Cercopidae**

- 95) *Cercopis intermedia* Kirschbaum, 1868. Material studied: 1 ex at 65Ai, 1 ex at 65Ag, 1 ex at 65Am3.

**Pseudococcidae**

For the species, see Kaydan et al. (2001, 2010, 2011).

- 96) \**Mirococcopsis multicircularia* Kaydan & Gavrilov, 2010.  
 97) \**Mirococcopsis teberdae* (Danzig, 1985).  
 98) \**Euripersia amnicola* Borchsenius, 1948.  
 99) \**Peliococcus manifestus* Borchsenius, 1949.  
 100) \**Phenacoccus loiki* Danzig, 2001.

**Hemiptera****Coreidae**

- 101) *Coriomeris* sp. Material studied: 1 ex at 65Am1.  
 102) *Syromastus rhombeus* (Linnaeus, 1767). Material studied: 1♂ at 65Ai.

**Lygaeidae**

- 103) *Lygaeus equestris* (Linnaeus, 1758). Material studied: 3♂♀ at 65Am1, 1♂ at 65An (**Fig. 19**)  
 104) *Spilostethus saxatilis* (Scopoli, 1763). Observed at 65Am1, 65Am2.



**Fig. 19** - *Lygaeus equestris*, in copula. Bahçesaray, Upper Mukus Valley 1825m, 10 5 2016. M. Kemal (Cesa)



**Pentatomidae**

- 105) *Palomena prasina* (Linnaeus,1761). Material studied: 1♂ at 65Ai.

**Planipennia****Chrysopidae**

- 106) *Chrysoperla carnea* (Stephens,1836). Material studied: 1♂ at 65Am1.

**Diptera****Bibionidae**

- 107) *Bibio hortulanus* (Linnaeus,1758). Material studied: 1♂ at 65Ag.  
108) *Bibio marci* (Linnaeus,1758). Material studied: 3♂♀ at 65Am1.

**Bombyliidae**

- 109) *Bombylella atra* (Scopoli,1763). Material studied: 1 ex. at 65Ai.

**Limoniidae**

- 110) *Limonia* sp. (Limoniidae). Material studied: 3♂♀ at 65Ai. In shadow, it flies early in the morning.  
This group will be studied separately.

**Scathophagidae**

- 111) *Scathophaga stercoraria* (Linnaeus,1758) (Scathophagidae). Material studied: 1♂ at 65An.

**Stratiomyidae**

- 112) *Stratiomys singularior* (Harris,[1776]). This species is only observed at 65Ao; therefore, identified tentatively. If it is confirmed, then new record for the fauna of Turkey! (**Fig. 20**)



**Fig. 20** - *Stratiomys singularior*, observed at rest. Bahçesaray, in orchards of Kasr, 10 5 2016, M. Kemal (Cesa)

**Syrphidae**

- 113) *Eristalinus (Lathyrrophthalmus) aeneus* (Scopoli,1763). Material studied: 1♂ at 65Am1.  
 114) *Eristalis (Eoseritalis) arbustorum* (Linnaeus,1758). Material studied: 3♂ at 65Am1.  
 115) *Eupeodes aff. latifasciatus* (Macquart,1829). Material studied: 1♂ at 65Ai. This species is reported here from Bahçesaray, near Paşaköy. New to the fauna of Van Province!  
 116) *Merodon* sp. Material studied: 1♂ at 65Am1.  
 117) *Merodon velox* Loew,1869. Material studied: 2♂ at 65Ai.  
 118) *Sphaerophoria scripta* (Linnaeus,1758). Material studied: 3♀ at 65Am1.

**Tachinidae**

- 119) *Tachina fera* (Linnaeus,1761). Material studied: 2 ex at 65Am1.

**Tephritidae**

- 120) *Urophora jaceana* (M.Hering,1935). Material studied: 1ex at 65Am1. This is new record for the fauna of Van Province!

**Tipulidae**

- 121) *Nephrotoma* sp. Material studied: 2♂ 1♀ at 65Ai. In shadow, it flies early in the morning; also nocturnal.

**Hymenoptera****Apidae**

- 122) *Xylocopa (s.str.) violacea* (Linnaeus,1758). Material studied: 1♀ at 65Ai.

**Cynipidae**

All the following species are in gall form on *Quercus petraea* (Matt.), at Paşaköy (65Ai).

- 123) *Andricus aries* (Giraud,1859).  
 124) *Andricus grossulariae* Giraud,1859.  
 125) *Andricus insanus* (Westwood,1837).  
 126) *Andricus kollari* (Hartig,1843).  
 127) *Andricus megalucidus* Melika, Stone, Sadeghi & Pujade-Villar,2004.  
 128) *Andricus quercustozae* (Bosc,1792).  
 129) *Andricus tomentosus* (Trotter,1901).  
 130) *Andricus askewi* Melika & Stone,2001.

**Vespididae**

- 131) *Polistes (s.str.) dominula* (Christ,1791). Material studied: 4 ex at 65Am1.

**Coleoptera****Attelabidae**

- 132) *Deporaus (Caenorhinus) mannerheimii* (Hummel,1823). Material studied: 2 ex at 65Ai.  
 133) *Attelabus nitens* (Scopoli,1763).

**Carabidae**

- 134) *Cicindela asiatica* Audouin & Brullé, 1839. Material studied: 1 ex at 65Ag.

**Cerambycidae**

- 135) *Dorcadion pedestre* (Poda, 1761). Material studied: 1♂ at 65Am1.

**Chrysomelidae**

- 136) *Smaragdina limbata* (Steven, 1806). Material studied: 3♂♀ at 65Am1.  
137) *Cassida* sp. Material studied: 1 ex at 65Ai.  
138) *Labidostomis* sp. Material studied: 3♂♀ at 65Am1 (**Fig. 21**)

**Cleridae**

- 139) \**Trichodes ephippiger* Chevrolat, 1874. Material studied: 1 ex at 65Ag, 1 ex at 65Ai.  
140) \**Trichodes sexpustulatus* Chevrolat, 1874.

**Coccinellidae**

- 141) *Coccinella* (s.str.) *septempunctata* Linnaeus, 1758. Material studied: 1 ex at 65Am1.



**Fig. 21** – *Labidostomis* sp., in copula. Upper Mukus valley 1910m, 10 5 2016, M. Kemal (Cesa)

**Glaphyridae**

- 142) Various species were observed.

**Melyridae**

- 143) *Malachius* sp.



## Scarabaeidae

- 144) *Cetonia (s.str.) aurata* (Linnaeus,1761). Material studied: 1♂ at 65Am1.  
145) *Oxythyrea cinctella* (Schaum,1841). Material studied: 1♂ at 65Ai.

## Silphidae

- 146) *Silpha obscura* Linnaeus,1758. Material studied: 1ex at 65Am1.

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## Nomenclatural notes on the genus *Eupithecia* Curtis (*Lepidoptera*, *Geometridae*)

Muhabbet Kemal<sup>3</sup> Ahmet Ömer Koçak

**Abstract:** Nomenclatural notes on the genus *Eupithecia* Curtis (*Lepidoptera*, *Geometridae*). Cent. ent. Stud., *Misc.Pap.* 161: 17-18.

This paper deals with the nomenclatural acts on three species group taxa in the genus *Eupithecia* Curtis (*Lepidoptera*, *Geometridae*). As a result of this, two junior synonyms, *Eupithecia jamesi* Ferris & Mironov, 2007 and *Eupithecia eduardi* Mironov & Ratzel, 2012, are proposed.

**Key words:** *Eupithecia*, *Geometridae*, *Lepidoptera*, nomenclature, synonym, United States, France, Iran.

In this short note, the homonymy case in three species group taxa in the genus *Eupithecia* Curtis, is discussed.

### *Eupithecia zekiyae* Koçak, 1986

*Eupithecia deserticola* Mc Dunnough, 1946, *Can. Ent.* 78: 88 (junior secondary homonym of *deserticola* Turati, 1934)

*Eupithecia zekiyae* Koçak, 1986, *Priamus* 4 (1/2): 59 <http://zoobank.org/urn:lsid:zoobank.org:act:D9D4A3C0-ADDB-41A8-B5FB-E17E5FB173D0> (replacement name for *deserticola* Mc Dunnough, 1946 nec Turati, 1934, non Dietze, 1910)

*Eupithecia jamesi* Ferris & Mironov, 2007 (replacement name for *deserticola* Mc Dunnough, 1946 nec Turati, 1934) (**syn.nov.**)

**Range:** U.S.A., Arizona, Nevada, California.

Ferris and Mironov (2007) proposed a replacement name *jamesi* for the pre-occupied name *deserticola* Mc Dunnough, 1946. This new name was also repeated by the authors in 2001 (Koçak & Kemal, 2001: 5). Unfortunately, Ferris and Mironov (2007) overlooked both previous papers published on the same subject. Therefore, the latest name *jamesi* must be considered as junior objective synonym of *zekiyae* Koçak, 1986.

### *Eupithecia alliaria* ssp. *jehannedarc* Koçak & Kemal, 2001

*Eupithecia alliaria* f. *notata* Dietze, 1910, *Biol. Eupitheci* 1: pl. 70, 135, 136. *ibid.* 2 (1913): 61. Syntypes: France, Digne. According to Mironov (2003), this name is valid as a subspecific taxon.

*Eupithecia alliaria* ssp. *jehannedarc* Koçak & Kemal, 2001. <http://zoobank.org/urn:lsid:zoobank.org:act:30E7FD9C-83D6-43EE-9F1A-37F563F1F23F> The authors proposed a replacement name for *notata* Dietze, 1910 as it is junior homonym of *notata* Stephens, 1831. Therefore, the valid subspecific name is *jehannedarc* Koçak & Kemal, 2001.

**Range:** France, Digne.

### *Eupithecia iranica* Koçak & Kemal, 2001

*Eupithecia inquinata* Schütze, 1961, *Mitt. Münch. Ent. Ges.* 51: (Invalid, as it is junior primary homonym of *Eupithecia inquinata* D.S. Fletcher, 1950 from Ethiopia).

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*Eupithecia iranica* Koçak & Kemal, 2001, Cent. ent. Stud., Misc. Pap. 77: (Replacement name for *E. inquinata* Schütze, 1961 nec Fletcher, 1950). <http://zoobank.org/urn:lsid:zoobank.org:act:29EB6973-3327-4620-9427-4B74F04934A2>  
*Eupithecia eduardi* Mironov & Ratzel, 2012, Ent. Z., Stuttg. 122: 37 (Replacement name for *E. inquinata* Schütze, 1961 nec Fletcher, 1950) (**syn.nov.**)

Mironov and Ratzel (2012) proposed a replacement name *Eupithecia eduardi* for the pre-occupied name *Eupithecia inquinata* Schütze. However, this name is not valid, as it is junior synonym of *Eupithecia iranica* Koçak & Kemal, 2001.

Range: Iran.

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